Fall 2016 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

MA0013 Sutter Maintenance Yard Maintenance	Overall LMA Rating	Total LMA Miles	however, U	Threshold Perce Rated Miles are p instead of A.				
Area 0013	M *	41.03	,	Instead of A.			Design 8	& System
Rated Item	NA NAILOO		nce Deficiancy M + 4U Miles	Throphold 0/	M Miles	ement U Miles		scence
Forthern Lovine	M Miles	U Miles	IVI + 4U IVIIIes	Threshold %	IVI IVIIIes	U Miles	M Miles	U Miles
Earthen Levee Vegetation	1.53		1.53	3.73%	0.13			
Trim / Thin Trees	0.37	0.01	0.41	1.00%				
Encroachments	0.06		0.06	0.15%	12.21	0.26		
Animal Control	0.04	0.02	0.12	0.29%		0.20		
Slope Stability	0.04	0.02	0.04	0.10%				
Erosion / Bank Caving	0.03		0.03	0.07%				
Supplemental	0.00		0.00	0.0170				
2015 USACE Erosion Survey, DRAFT	0.01		0.01	0.02%				
DWR UCIP Field Study					0.51	0.08		
LMA Totals:	2.08	0.03	2.20	5.36% *	12.85	0.34	0.00	0.00
Unit No. 01 Cherokee Canal RB	Overall Unit Rating	Total Unit Miles		Threshold Percer es are present, so				
MA0013	IVI	18.19			I		Design 8	& System
Rated Item			nce Deficiancy			ement	Obsole	scence
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee Vegetation	0.90		0.90	4.95%	0.07			
Trim / Thin Trees	0.90	0.01	0.90	0.44%	0.07			
Encroachments	0.04	0.01	0.00	0.06%	3.11	0.01		
Animal Control	0.01		0.01	0.06%	3.11	0.01		
Slope Stability	0.01		0.01	0.00%				
<u> </u>	0.02		0.02	0.11%				
Erosion / Bank Caving Supplemental	0.01		0.01	0.00%				
2015 USACE Erosion Survey, DRAFT	0.01		0.01	0.06%				
DWR UCIP Field Study	0.0.		0.01	0.0070	0.20	0.05		
Unit Totals:	1.00	0.01	1.04	5.72% *	3.38	0.06	0.00	0.00
Unit No. 02 Cherokee Canal LB	Overall Unit Rating	Total Unit Miles 22.84		Threshold Perceres are present, so				
MA0013	IVI ^				1		Design 8	& System
Rated Item			nce Deficiancy			ement	Obsole	scence
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee Vegetation	0.63		0.63	2.76%	0.06			
Trim / Thin Trees	0.83		0.63	1.45%	0.06			
Encroachments	0.33		0.33	0.22%	9.10	0.25		
Animal Control		0.02			9.10	0.25		
	0.03	0.02	0.11	0.48%				
Slope Stability	0.02		0.02	0.09%				
Erosion / Bank Caving	0.02		0.02	0.09%				
Supplemental DWR UCIP Field Study					0.31	0.03		
Unit Totals:	1.08	0.02	1.16	5.08% *	9.47	0.28	0.00	0.00
One rotals.	1.00	0.02	0	0.0070	0.71	0.20	0.00	0.00

LMA District Cover Sheet

Fall 2016 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)						
† Overall LMA Rating (Fall Only)			M *							
** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating. * Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.										
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.										
FALL INSPECTIONS: The overall maintena within the attached u			on and maintenance de nded to be an indiction o							
Comments										

Unit Cover Sheet

Fall 2016 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles
Unit No. 01 Cherokee Canal	Right	18.19

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M *	
Date of Inspection	4/14/2016 - 4/14/2016		9/21/2016 - 10/6/2016	
DWR Inspector	Keith Millard		Tariq Chechi	
Accompanied By	Shawn Freitag Sutter Maintenance Yard			

^{*} Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	Rating ** A			Issue No.		1	
LM End		Issue Type +	Ma	Location * LS			
Category	Earthen Levee			GPS La	atitude	e/Longitude	
Calegory			Start		End		
Operations & Maintenance			0		0		
Item	Manuals				0		0
DWR ID	DWR_MA0	013_01_s _ 201					
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
The LMA h	nas the O8	M manuals.					

No Photos

LM Start		Rating **	Α	Issue No.		8		
LM End	Issue Type + Ma		Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
		Start		End				
Item		y Supplies &			0		0	
Equipm		nt		0		0		
DWR ID	DWR_MA0	DWR_MA0013_01_s _ 2013_8						
		Comn	nent Cod	de				
	Inspector Comment							
The LMA has adequate flood fight supplies and equipment.						t.		

No Photos

		D 11 ++					
LM Start		Rating ** A		Issue No.		16	
LM End		Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory			Start		End		
Item	Flood Pre	paredness &	Training		0		0
item				o		0	
DWR ID	DWR_MA0013_01_s _ 2013_16						
		Comn	nent Cod	le			
		Inspecto	or Comm	ent			
The LMA	The LMA completed flood fight training in 2014.						

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	0.03	Rating **	С	Issue No.		48		
LM End	0.03	Issue Type +	En	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
				Start		End		
Item	Encroachments			39.5965	49°	39.596549°		
пеш			-121.702816 °		-121.702816°			
DWR ID	DWR_MA0	013_01_s _ 201	6_48					
		Comn	nent Coo	de				
DE : Debri	S							
		Inspecto	or Comm	nent				
Soil and or	Soil and organic matter pile on slope							

No Photos

LM Start	0.27	Rating **	U	Issue No.		86	
LM End	0.27	Issue Type +	En	Location *		WS	
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.5930	94°	39.593094	0
пеш				-121.7035	70°	-121.703570	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:50973 DS_ID:16327 EP_NO: 6135 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 11/16/2016 Appears no repairs have been made here yet as LS slope is still dug away. (DWR Sutter Yard-AFreitag)4/28/2016 8-inch pipe was running water but was leaking at a weld joint on the LS slope. Pipe appears to have been dug out by the landowner but unsure if repairs are being made yet. (see photo 5)7/14/2015 Pipe end is still welded solid.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.

FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee 2.8 feet below the crown. Permit requirements are as follow: during the flood season the 5-inch irrigation pipe will be removed and a plate bolted over the waterside (WS) end of the 8-inch. Pipe section is completely buried. Current configuration does not allow for 5-inch irrigation pipe to slide pipe through. 8-inch pipe is welded solid. (Permit No. 6135, 1968 - George Washington) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 11/28/2016 8:45:31 AM

Photo 1 of 2: UCIP_FA_2016_50973_66680.jpg



Overview of the crossing.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	0.27	Rating **	U	Issue No.		86 (cont)	
LM End	0.27	Issue Type +	En	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	P Field Study		39.59309	4°	39.593094	۰
пеш				-121.70357	o°	-121.703570	٥
DWR ID							

Comment Code

Inspector Comment

FS_ID:50973 DS_ID:16327 EP_NO: 6135 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 11/16/2016 Appears no repairs have been made here yet as LS slope is still dug away. (DWR Sutter Yard-AFreitag)4/28/2016 8-inch pipe was running water but was leaking at a weld joint on the LS slope. Pipe appears to have been dug out by the landowner but unsure if repairs are being made yet. (see photo 5)7/14/2015 Pipe end is still welded solid.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.

FIELD STRUCT_DESC: 8-inch steel irrigation pipe through the levee 2.8 feet below the crown. Permit requirements are as follow: during the flood season the 5-inch irrigation pipe will be removed and a plate bolted over the waterside (WS) end of the 8-inch. Pipe section is completely buried. Current configuration does not allow for 5-inch irrigation pipe to slide pipe through. 8-inch pipe is welded solid. (Permit No. 6135, 1968 - George Washington) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 11/28/2016 8:45:31 AM



Air Vent located on WS.

	LM Start	0.45	Rating **	С	Issue No.		43			
	LM End	0.45	Issue Type +	En	Location *		LS			
	Category	Earthen Levee				GPS Latitude/Longitude				
	Calegory				Start		End			
	Item	Encroachi	Encroachments		39.59123	37°	39.591237°			
	itom				-121.7020°	15°	-121.702015°			
	DWR ID	DWR_MA0	013_01_f _ 201	5_43						
Comment Code										

PR : Prunings

Inspector Comment

Remove the prunings from the landside slope. The pile was burned.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	0.63	Rating **	М	Issue No.		46		
LM End	0.63	Issue Type +	En	Location *		LS		
Cotogony	evee	GPS La	titud	le/Longitude				
Category			Start		End			
Item	Encroach	ments		39.5893	37°	39.589337°		
item				-121.70060)4 °	-121.700604°		
DWR ID DWR_MA0013_01_f _ 2016_46								
		Comn	nent Cod	de				
PR : Pruni	ngs							
		Inspecto	or Comm	nent				
Remove the prunings from the landside toe.								

No Photos

Rating ** Issue No. LM Start 0.63 Μ 14 Issue Type + En Location * LS LM End 1.17 Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 39.589272° 39.581472° -121.700599 ° -121.700518° DWR ID DWR_MA0013_01_s _ 2012_14 Comment Code DT: Ditch Inspector Comment

No Photos

LM Start	0.73	Rating **	M	Issue No.	12				
LM End	0.76	Issue Type +	En	Location *	LS				
Catagory	Category Earthen Levee					le/Longitude			
Calegory	Category					End			
Item	39.5879	05°	39.587505	0					
пеш	item					-121.700880	0		
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_12								
		Comn	nent Cod	de					
EQ : Equip	ment								
		Inspecto	or Comm	nent					
Remove th	Remove the equipment from the landside toe.								

Photo 1 of 1: FA_2016_MA0013_300_12_20160823_00006.jpg



View of the equipment along the landside toe of the levee.

Location + Issue Type LS: Land Side N : Not Inspected/Rated Ma: Maintenance Deficiancy N/A: Not Applicable A : Acceptable M : Minimally Acceptable WS: Water Side C : Corrected Ob : Design & System Obsolescence A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	0.87	Rating **	U	Issue No.		44
LM End	0.87	Issue Type +	En	Location *		LS
Category	evee	GPS La	atitud	le/Longitude		
Category				Start		End
Item	Encroach	ments		39.5858	857°	39.585857°
пеш				-121.700540 °		-121.700540°
DWR ID DWR_MA0013_01_s _ 2015_44						
		Comn	nent Cod	de		
PR : Pruni	ngs					
		Inspecto	or Comm	nent		
Remove the prunings from the landside slope.						

Photo 1 of 1: FA_2016_MA0013_300_44_20161010_00079.jpg

View of the prunings and tree stumps along the landside slope.

LM Start	0.94	Rating **	М	Issue No.		20
LM End	0.94	Issue Type +	En	Location *	LS	
Catagory	Earthen Levee			GPS Latitude/Longitude		
Category			Start		End	
Item	Encroach	ments		39.5848	85°	39.584885 °
item				-121.7004	87°	-121.700487°
DWR ID	DWR_MA0	013_01_s _ 201	3_20			

Comment Code

PR : Prunings

Inspector Comment

Remove prunings from the landside toe.

Photo 1 of 1 : FA_2016_MA0013_300_20_20160823_00009.jpg



View of the prunings along the landside toe.

LM Start	1.17	Rating **	М	Issue No.		52	
LM End	1.24	Issue Type +	Ma	Location *	LS		
Category	evee	GPS La	tituc	le/Longitude			
Category	y			Start		End	
Item	Vegetation			39.581441 °		39.581385°	
item				-121.7005	32°	-121.701560 °	
DWR ID	DWR_MA0	013_01_f _ 201	6_52				
		Comn	nent Cod	de			
	V1 : Control annual grass and weeds on the levee slopes and easements.						

Inspector Comment



View of the vegetation along the landside slope.

*Location

LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating

A: Acceptable
N: Not Inspected/Rated
M: Ma: Maintenance Deficiancy
M: Minimally Acceptable
C: Corrected
U: Unacceptable
A/W: Acceptable but Monitor & Maintain
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	1.59	Rating **	U	Issue No.		87	
LM End	1.59	Issue Type +	En	Location *		LS	
Category	Supplemental				atitud	le/Longitude	
Calegory				Start End			
Item	DWR UCI	P Field Study		39.5768	83°	39.576883°	
пеш				-121.7027	70°	-121.702770°	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:50976 DS_ID:16831 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

FS Date: 11/28/2016 9:12:52 AM

UCIP Comments: 11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

Photo 1 of 2: UCIP_FA_2016_50976_66695.jpg



Overview of levee crown at crossing looking downstream.

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Flood Control Project Maintenance Levee Inspections

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	1.59	Rating **	U	Issue No.		87 (cont)	
LM End	1.59	Issue Type +	En	Location *		LS	
Category				GPS La	atitud	le/Longitude	
Calegory				Start	End		
Item	DWR UCI	P Field Study		39.5768	83°	39.576883°	
пеш				-121.7027	70°	-121.702770 °	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:50976 DS_ID:16831 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

FS Date: 11/28/2016 9:12:52 AM



Corrugated metal riser with slide gate located on WS slope.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	1.66	Rating **	M	Issue No.		88			
LM End	1.66	Issue Type +	En	Location *	LS				
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start	Start				
Item	DWR UC	IP Field Study		39.5758	16°	39.575816°			
пеш				-121.7029	00°	-121.702900°			
DWR ID						·			

Inspector Comment

Comment Code

FS_ID:50977 DS_ID:16345 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/16/2016 PVC pipe still present blocking the screw gate. (DWR Sutter Yard-AFreitag)4/28/2016 Pvc pipe is still present through the crossing. Slide gate cannot shut fully.7/14/2015 4-inch pipe still present and blocking the screw gate.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing.

FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete headwall on the landside (LS). 36-inch concrete standpipe in the channel with 2 piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.69)] FS Date: 11/28/2016 9:13:39 AM

LM Start	1.66	Rating **	М	Issue No.	88 (cont)
LM End	1.66	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_FA_2016_50977_66700.jpg



Overview of levee at crossing looking downstream.

Photo 2 of 2: UCIP_FA_2016_50977_66704.jpg



WS view looking upstream.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	2.31	Rating **	М	Issue No.		89	
LM End	2.31	Issue Type +	En	Location *	LS		
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.56643	3°	39.566433	0
пеш				-121.70375	0 °	-121.703750	0
DWR ID							

Inspector Comment

Comment Code

FS_ID:50978 DS_ID:16346 EP_NO: N/A

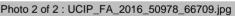
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/16/2016 Appears abandoned. Unable to find anything on LS. (DWR Sutter Yard- AFreitag)4/28/2016 Appears to be an abandoned crossing. LS headwall and pipe inlet are still completely buried.7/14/2015 Still cannot find an inlet or outelt.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Pipe continues across channel. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.35)] FS Date: 11/28/2016 9:14:42 AM

LM Start	2.31	Rating **	М	Issue No.	89 (cont)
LM End	2.31	Issue Type +	En	Location *	LS



Overview of crossing looking DS.





Corrugated riser located on WS slope.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	3.05	Rating **	М	Issue No.		90
LM End	3.05	Issue Type +	En	Location *		LS
Category				GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5563 ⁻	10°	39.556310°
пеш			-121.7064	70°	-121.706470 °	
DWR ID						

Inspector Comment

Comment Code

FS_ID:50980 DS_ID:17372 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard- AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flapgate is located on the waterside (WS). Concrete headwall located located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 11/28/2016 9:44:54 AM

LM Start	3.05	Rating **	М	Issue No.	90 (cont)
LM End	3.05	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_FA_2016_50980_66718.jpg



Overview of levee crown looking downstream at crossing.

Photo 2 of 2: UCIP_FA_2016_50980_66716.jpg



WS levee slope.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	3.05	Rating **	М	Issue No.		91			
LM End	3.05	Issue Type +	En	Location *		LS			
Category	Supplemental					GPS Latitude/Longitude			
Calegory	Category					End			
Item	DWR UC	IP Field Study		39.5562	76°	39.556276	0		
пеш				-121.7065	10°	-121.706510	0		
DWR ID									
	Comment Code								

Inspector Comment

FS_ID:50981 DS_ID:16348 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 11/16/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/28/2016 Unable to locate.7/14/2015 Unable to locate.5/21/2014 Same as last inspection.12/2/2013 Unable to locate.7/15/2013 Same as last inspection.

locate.7/15/2013 Same as last inspection. Unable to

locate.4/18/2012 Crossing not visible during the Spring 2012

Inspection. Attempt to find crossing during next inspection when slopes

are cleared of vegetation.

FIELD_STRUCT_DESC: 24-inch drainage pipe through the levee at an unknown depth below the crown. Concrete headwall on both waterside (WS) and landside (LS) ends. Flap gate located on the WS end.

[Additional Reference(s): DWR Levee Log, 1993]

FS Date: 11/28/2016 9:47:48 AM

No Photos

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	3.24	Rating **	М	Issue No.		92
LM End	3.24	Issue Type +	En	Location *		LS
Category	Supplemental		GPS Latitud		titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.55349	0°	39.553490°
пеш				-121.70668	0°	-121.706680°
DWR ID						·

Inspector Comment

Comment Code

FS_ID:50982 DS_ID:16349 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment

build up on both gates blocking them from operating

properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet.

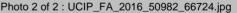
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 11/28/2016 10:01:28 AM

LM Start	3.24	Rating **	М	Issue No.	92 (cont)
LM End	3.24	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_50982_66725.jpg



Overview of levee crown looking DS at crossing.





Flap gate on WS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	3.70	Rating **	М	Issue No.		69		
LM End	3.74	Issue Type +	Ма	Location *		LS		
Category	Earthen Levee			GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Vegetatio	า		39.5469	10°	39.546333°		
пеш				-121.7076	35°	-121.707518°		
DWR ID DWR_MA0013_01_f _ 2016_69								
		Comn	nent Cod	de				
V1 : Contro easements		rass and wee	ds on th	e levee slop	oes a	and		
		Inspecto	or Comm	nent				

No Photos

Rating ** Issue No. LM Start 3.73 Μ 51 Issue Type + En Location * LS LM End 3.73 Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 39.546465° 39.546465° -121.707530 ° -121.707530° DWR ID DWR_MA0013_01_s _ 2016_51 Comment Code EQ: Equipment Inspector Comment Remove ag equipment from the toe of slope.

No Photos

CR : Crown

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	3.74	Rating **	М	Issue No.		93
LM End	3.74	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.5463	17°	39.546317°
пеш				-121.7075	10°	-121.707510°
DWR ID						

Comment Code

Inspector Comment

FS_ID:50985 DS_ID:16365 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard- AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)] FS Date: 11/28/2016 10:05:45 AM

LM Start	3.74	Rating **	М	Issue No.	93 (cont)
LM End	3.74	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_50985_66743.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 2: UCIP_FA_2016_50985_66741.jpg



WS flap gate blocked by debris.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated C: Corrected M: Minimally Acceptable U: Unacceptable AW: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	4.06	Rating **	М	Issue No.		18	
LM End	4.13	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		39.5416	60°	39.540651 °	
item				-121.7074	08°	-121.707404°	
DWR ID DWR_MA0013_01_s _ 2013_18							
		Comn	nent Cod	de			
V6 : Lands	caping						
		Inspecto	or Comm	nent			

Photo 1 of 1: FA_2016_MA0013_300_18_20160823_00008.jpg



View of the redwood trees along the landside slope.

LM Start	4.15	Rating **	М	Issue No.	68		
LM End	4.26	Issue Type +	Ма	Location *	LS		
Earthen Levee			GPS Latitude/Longitude				
Category			Start	End			
Item	Vegetation			39.5404	28°	39.538823°	
пеш				-121.7074	23°	-121.707449°	
DWR ID	DWR_MA0	013_01_f _ 201	6_68				
		Comn	nent Cod	de			
V1 : Control annual grass and weeds on the levee slopes and easements.							
	Inspector Comment						

No Photos

LM Start	4.45	Rating **	С	Issue No.		47
LM End	5.35	Issue Type +	Ma	Location *		CR
Category	Earthen L	evee		GPS L	atitud	e/Longitude
Category				Start		End
Crown Surface / Depressions /				39.5360)17°	39.523020°
item	Rutting			-121.7077	'05 °	-121.707577°
DWR ID	DWR_MA0	013_01_s _ 201	15_47			
		Comn	nent Cod	de		
C2 : Repai	ir depressi	ons or ruts in	the crow	n or slope.		
		Inspecto	or Comm	nent		
Repair the	ruts in the	crown roadw				

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	5.38	Rating **	М	Issue No.	94			
LM End	5.38	Issue Type +	En	Location *	CR			
Category Supplemental				GPS Latitude/Longitude				
Category			Start		End			
Item	DWR UCI	P Field Study		39.52256	3°	39.522566	0	
пеш				-121.70756)°	-121.707560	0	
DWR ID								

Inspector Comment

Comment Code

FS_ID:50992 DS_ID:16357 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last

inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.48)] FS Date: 11/28/2016 10:50:24 AM

LM Start	5.38	Rating **	М	Issue No.	94 (cont)
LM End	5.38	Issue Type +	En	Location *	CR

Photo 1 of 2: UCIP_FA_2016_50992_66764.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 2: UCIP_FA_2016_50992_66765.jpg



View of WS slope and channel.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	5.63	Rating **	М	Issue No.		71		
LM End	5.63	Issue Type +	En	Location *	CR			
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Itom	DWR UCI	P Field Study		39.51921	2 °	39.519212	0	
пеш	Item			-121.70903	80°	-121.709030	0	
DWR ID								

Inspector Comment

Comment Code

FS_ID:47642 DS_ID:16359 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last

inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13D_2011_p_0210 for WS gate submerged.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.73)]
FS Date: 5/4/2016 8:56:00 AM

LM Start	5.63	Rating **	М	Issue No.	71 (cont)
LM End	5.63	Issue Type +	En	Location *	CR



Overview of levee crown at crossing looking downstream.

Photo 2 of 2: UCIP_FA_2016_47642_66794.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Otant	5.67	Rating **	С	Issue No.		50			
LM Start	5.67	Rating		issue ivo.	30				
LM End	5.67	Issue Type +	En	Location *	LS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Encroachments					39.518731 °			
item	-121.709293 ° -121.70929								
DWR ID DWR_MA0013_01_s _ 2016_50									
		Comn	nent Cod	de					
DE : Debri	S								
		Inspecto	or Comm	nent					
Scrap metal drbris									

No Photos

Rating ** Issue No. LM Start 6.17 Μ 67 Issue Type + En Location * LS LM End 6.17 Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 39.512157° 39.512157 ° -121.713171 ° -121.713171 DWR ID DWR_MA0013_01_f _ 2016_67 Comment Code DT : Ditch Inspector Comment

No Photos

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	6.23	Rating **	М	Issue No.		72		
LM End	6.23	Issue Type +	En	Location *		LS		
Supplemental				GPS Latitude/Longitude				
Calegory	ategory			Start		End		
Itom	DWR UCI	P Field Study	P Field Study		37°	39.511337°		
пеш	Item		-121.71362	20°	-121.713620°			
DWR ID								

Inspector Comment

Comment Code

FS_ID:47644 DS_ID:16361 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/28/2016 LS screwgate is still completely buried.

7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)] FS Date: 5/4/2016 9:01:00 AM

LM Start	6.23	Rating **	М	Issue No.	72 (cont)
LM End	6.23	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_47644_66808.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 2: UCIP_FA_2016_47644_66806.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	6.41	Rating **	М	Issue No.		3	
LM End	6.99	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		39.5089	28°	39.501438°	
пеш				-121.714842 °		-121.719715°	
DWR ID DWR_MA0013_01_s _ 2012_3							
		Comn	nent Cod	de			
DT : Ditch							
		Inspecto	or Comm	nent			

Photo 1 of 1 : FA_2016_MA0013_300_3_20160823_00002.jpg

View of the agricultural ditch along the toe.

LM Start	6.45	Rating **	U	Issue No.		83		
LM End	6.45	Issue Type +	En	Location *		LS		
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP Field Study		39.50830)9°	39.508309°			
пеш				-121.71510	00°	-121.715100°		
DWR ID						·		

Comment Code

Inspector Comment

FS_ID:49923 DS_ID:16362 EP_NO: 5200B Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/28/2016 Hole still present behind the LS flashboards. Rest of the crossing appeared in good condition. (DWR Sutter Yard - afreitag)7/13/2015 Hole still present behind the LS flashboards. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/2/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS. (DWR Sutter Yard - afreitag)4/18/2012 Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends (Permit No. 5200B - 1965, Richvale Irrigation District) (Additional Related Permit(s): Permit No. 5200 and 5200A) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 519. June 1962 (HLM 6.56)] FS Date: 5/4/2016 9:02:00 AM

Photo 1 of 2: UCIP_FA_2016_49923_66814.jpg



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	6.45	Rating **	U	Issue No.		83 (cont)
LM End	6.45	Issue Type +	En	Location *		LS
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P Field Study	P Field Study		09°	39.508309°
пеш					00°	-121.715100°
DWR ID						·

Inspector Comment

Comment Code

FS_ID:49923 DS_ID:16362 EP_NO: 5200B Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/28/2016 Hole still present behind the LS flashboards. Rest of the crossing appeared in good condition. (DWR Sutter Yard - afreitag)7/13/2015 Hole still present behind the LS flashboards. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/2/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS. (DWR Sutter Yard - afreitag)4/18/2012 Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends (Permit No. 5200B - 1965, Richvale Irrigation District) (Additional Related Permit(s): Permit No. 5200 and 5200A) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.56)] FS Date: 5/4/2016 9:02:00 AM



View of WS slope and toe.

6.53	Rating **	M	Issue No.		2		
6.53	Issue Type +	En	Location *	LS			
arthen L	evee		GPS La	atitud	e/Longitude		
			Start		End		
Encroachments			39.5073	37°	39.507337°		
					-121.715693°		
WR_MA0	013_01_s _ 201	2_2					
	Comn	nent Coc	le				
ıl							
Inspector Comment							
١	6.53 arthen Le	6.53 Issue Type + arthen Levee ncroachments WR_MA0013_01_s _ 201 Comn	6.53 Issue Type + En arthen Levee ncroachments WR_MA0013_01_s _ 2012_2 Comment Coc	6.53 Issue Type + En Location * arthen Levee	6.53 Issue Type + En Location * arthen Levee GPS Latitud Start acroachments 39.507337° -121.715693° WR_MA0013_01_s _ 2012_2 Comment Code		



Photo 1 of 1: FA_2016_MA0013_300_2_20160823_00001.jpg

View of a concrete block along the toe.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiancy

M : Minimally Acceptable CR : Corrected Ob: Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Not Inspected/Rated M: Maintenance Deficiancy
Ob: Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	6.99	Rating **	М	Issue No.		76	
LM End	6.99	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory	У			Start		End	
Item	DWR UCI	P Field Study		39.5014	79°	39.501479°	
пеш				-121.7197	10°	-121.719710°	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:47689 DS_ID:16329 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/28/2016 LS slide gate is still bent. Everyhting else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 5/4/2016 9:11:00 AM

LM Start	6.99	Rating **	М	Issue No.	76 (cont)
LM End	6.99	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_FA_2016_47689_66833.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 2: UCIP_FA_2016_47689_66832.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	7.62	Rating **	М	Issue No.		66		
LM End	7.62	Issue Type +	Ma	Location *		WS		
Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start End		End		
Item	Encroachi	ments		39.4940	45°	39.494045°		
пеш				-121.7264	20°	-121.726420°		
DWR ID	DWR_MA0	013_01_f _ 201	6_66					
		Comn	nent Cod	de				
DE : Debri	s							
		Inspecto	or Comm	nent				
Remove the tires from the waterside slope.								

No Photos

LM Start	8.81	Rating **	М	Issue No.		49	
LM End	8.81	Issue Type +	Ма	Location *		LS	
Category Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End	
Item	Erosion /	Bank Caving		39.4786	48°	39.478648°	
пеш				-121.7364	77 °	-121.736477°	
DWR ID DWR_MA0013_01_f _ 2016_49							
		Comn	nent Cod	de			
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.	
		Inspecto	or Comm	nent			

Photo 1 of 1 : FA_2016_MA0013_300_49_20161010_00087.jpg



View of the erosion site along the landside toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	8.82	Rating **	U	Issue No.	84	
LM End	8.82	Issue Type +	En	Location *	LS	
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start	art End	
Item	DWR UCI	P Field Study		39.4785	73°	39.478573°
пеш						-121.736550°
DWR ID						

Inspector Comment

Comment Code

FS_ID:49924 DS_ID:16323 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/28/2016 Erosion still present at the LS headwall. (DWR Sutter Yard - afreitag)7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/18/2012 Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: [Richvale Irrigation Canal Siphon] 60-inch by 84-inch (5-foot by 7 foot) concrete irrigation conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on the waterside (WS). Concrete headwall on the landside (LS). 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.95)] FS Date: 5/4/2016 9:24:00 AM

8.82 Rating ** U Issue No. 84 (cont) LM Start Issue Type + Location ' 8.82 En LS LM End





Catwalk and screw gate located on WS.

Photo 2 of 2: UCIP FA 2016 49924 66884.jpg



Catwalk & gate located on WS. No daylight point on WS.

Location + Issue Type LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated Ma: Maintenance Deficiancy WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR : Crown U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	8.89	Rating **	М	Issue No.		73	
LM End	8.89	Issue Type +	En	Location *	LS		
Category			GPS Latitude/Longitude				
Calegory			Start			End	
Item	DWR UCI	P Field Study		39.47758	8 °	39.477588	0
пеш				-121.73704	0 °	-121.737040	0
DWR ID							

Inspector Comment

Comment Code

FS_ID:47664 DS_ID:16828 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/28/2016 Erosion happening around the concrete structure on LS. Its not yet affecting the levee but will keep monitoring.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Crossing is not visible on WS. FIELD_STRUCT_DESC: 72-inch irrigation pipe through the levee located 14.2 feet below the crown. Appurtances include concrete pipe siphon, screw gate, and distribution box visible on the landside (LS). No appurtenances found on the waterside (WS). [Additional Reference(s):

DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June

1962 (HLM 9.02)] FS Date: 5/4/2016 10:10:00 AM

LM Start	8.89	Rating **	М	Issue No.	73 (cont)
LM End	8.89	Issue Type +	En	Location *	LS



Overview picture looking south

Photo 2 of 2: UCIP_FA_2016_47664_66907.jpg



Headwall at LS distribution box

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	8.90	Rating **	М	Issue No.		70
LM End	8.90	Issue Type +	En	Location *	LS	
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.47753	30°	39.477530 °
пеш			•		60°	-121.737060 °
DWR ID						·

Inspector Comment

Comment Code

FS_ID:47447 DS_ID:16328 EP_NO: 1234A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/28/2016 Marker missing on WS.7/13/2015 Crossing appears in good condition. No noticeable issues to report.Need to contact owner to replace marker.7/15/2013 Same as last inspection.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: Underground telephone cable through the levee at an unknown depth below the crown. (Permit No. 1234, 1234A, 1947 - Pacific Telephone and Telegraph Company [PT&T]) [Additional

Reference(s): DWR Levee Log, 1993] FS Date: 5/4/2016 10:13:29 AM



Underground telephone cable marker located on WS.

LM Start	8.92	Rating **	М	Issue No.		65	
LM End	9.33	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitud			
Calegory				Start End		End	
Item	Encroachments			39.4772	45°	39.471975°	
item				-121.7372	53°	-121.740795 °	
DWR ID	DWR_MA0	013_01_f _ 201	6_65				
Comment Code							

FE: Fence

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	9.70	Rating **	М	Issue No.		5
LM End	9.72	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		39.4671	70°	39.466860°
пеш				-121.7438	887°	-121.744108°
DWR ID DWR_MA0013_01_s _ 2012_5						
		Comn	nent Cod	le		
T1 : Trim t	rees to at I	east five feet	above g	round level	•	
		Inspecto	or Comm	ent		



View of the overgrown trees along the landside slope and toe.

LM Start	9.73	Rating **	М	Issue No.	sue No. 10			
LM End	9.75	Issue Type +	En	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachments			39.4667	32°	39.466478°		
пеш	item				80°	-121.744338°		
DWR ID	DWR_MA0	013_01_f _ 201	3_10			·		
		Comn	nent Coc	de				
MA : Mater	rial							
Inspector Comment								
Move the t	Move the trailer and materials outside the 10 foot easement.							

Photo 1 of 1 : FA_2016_MA0013_300_10_20160823_00005.jpg



View of a trailer and material along the landside toe.

LM Start	9.75	Rating **	М	Issue No.		64			
LM End	9.75	Issue Type +	Ма	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Trim / Thin Trees				39.466478°		39.466478°			
пеш			-121.744338 °		-121.744338°				
DWR ID	DWR_MA0	013_01_f _ 201	6_64						
		Comn	nent Coo	de					
T1: Trim t	rees to at l	east five feet	above g	round level					
	Inspector Comment								

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	9.90	Rating **	М	Issue No.		63	
LM End	9.90	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		39.4645	27°	39.464527°	
item				-121.7455	68°	-121.745568°	
DWR ID DWR_MA0013_01_f _ 2016_63							
		Comn	nent Cod	de			
FE : Fence)						
		Inspecto	or Comm	nent			

No Photos

Rating ** Issue No. LM Start 9.96 Μ 17 Issue Type + Location * LS LM End 10.21 Ма Earthen Levee GPS Latitude/Longitude Category End Start Vegetation 39.463812° 39.460569° -121.746113 ° -121.748210° DWR_MA0013_01_f _ 2016_17 Comment Code

No Photos

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Dense tulies on the landside toe.

LM Start	11.58	Rating **	М	Issue No.		4		
LM End	11.59	Issue Type +	Ma	Location *	WS			
Category	ental	GPS Lat	ituc	le/Longitude				
Calegory				Start		End		
Item		CE Erosion S	Survey,	39.44282	1°	39.442738°		
item	DRAFT					-121.759908°		
DWR ID DWR_MA0013_01_s _ 2016_4								
	Comment Code							

No Photos

Inspector Comment

2011 - Small erosion pocket likely caused by irrigation diversion structure. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CHK_11-7_R]

*Location

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating

A : Acceptable
N : Not Inspected/Rated
C : Corrected

N : Not Inspected/Rated
C : Corrected
C : Corrected
U : Unacceptable
AW : Acceptable but Monitor & Maintain

** Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	12.19	Rating **	М	Issue No.		74
LM End	12.19	Issue Type +	En	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.43516	9°	39.435169°
пеш				-121.76529	o°	-121.765290°
DWR ID						

Inspector Comment

Comment Code

FS_ID:47672 DS_ID:16334 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 5/4/2016 12:18:00 PM

LM Start	12.19	Rating **	М	Issue No.	74 (cont)
LM End	12.19	Issue Type +	En	Location *	WS

Photo 1 of 2: UCIP_FA_2016_47672_66940.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 2: UCIP_FA_2016_47672_66936.jpg



View of Ws slope and channel.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	12.42	Rating **	М	Issue No.		62		
LM End	12.70	Issue Type +	Ma	Location *		LS		
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Vegetatio	n		39.4321	16°	39.428581 °		
item				-121.7673	41 °	-121.769739°		
DWR ID	DWR_MA0	013_01_f _ 201	6_62					
		Comn	nent Cod	de				
V1 : Contro easements		rass and wee	eds on th	e levee slo	pes a	and		
		Inspecto	or Comm	nent				

No Photos

LM Start	12.74	Rating **	М	Issue No.		77	
LM End	12.74	Issue Type +	En	Location *	LS		
Supplemental			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCIP Field Study			39.42807	o°	39.428070°	
пеш				-121.77008	0°	-121.770080°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:48049 DS_ID:16336 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 12.94)] FS Date: 5/4/2016 12:22:00 PM

Photo 1 of 2: UCIP_FA_2016_48049_66952.jpg



Overview picture looking south on right bank of Cherokee Canal.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	12.74	Rating **	М	Issue No.		77 (cont)	
LM End	12.74	Issue Type +	En	Location *		LS	
Category				GPS Latitude/Longitude			
Calegory	egory					End	
Item	DWR UCIP Field Study			39.4280	70°	39.428070°	
пеш				-121.77008	30°	-121.770080 °	
DWR ID							
Comment Code							

Inspector Comment

FS_ID:48049 DS_ID:16336 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 5/4/2016 12:22:00 PM

UCIP Comments: 4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)]

Photo 2 of 2 : UCIP_FA_2016_48049_66959.jpg



View of WS slope.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	13.29	Rating **	М	Issue No.		82	
LM End	13.29	Issue Type +	En	Location *		LS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category		Start		End		
Item	DWR UCI	P Field Study		39.4210	88°	39.421088°	
пеш				-121.7751	04°	-121.775104°	
DWR ID							

Inspector Comment

Comment Code

FS_ID:48060 DS_ID:16461 EP_NO: 17030

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/28/2016 Lines lines are suspected to be located on the upstream side of the roadway bridge and not the downstream side like the coordinates in this report show. Will need to take new coordinate readings. Markers are missing near levees.7/13/2015 Unable to locate.5/21/2014 Same as last inspection.12/3/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate any markers.4/18/2012 Attempt to locate this crossing during next inspection when tall grass is cleared from slopes-look for utility markers.

FIELD_STRUCT_DESC: 8-inch high density polyethylene (HDPE) communication conduit, contains three 2-inch and three 1.5-inch fiber optic cables, backfilled with bentonite on the ends of the bore casing through the levee at an unknown depth below the crown. Conduit is bored across and under Cherokee Canal and its levees. Permit records indicates the conduit is at least 5 feet below the bottom of the low flow of the channel. Owner is listed in the permit as Pacific Fiber Link LLC but permit Inspection sheets list Worldwide Fiber. (Permit No. 17030, 2000 - Worldwide Fiber)

FS Date: 5/4/2016 12:27:00 PM

LM Start	13.29	Rating **	М	Issue No.	82 (cont)
LM End	13.29	Issue Type +	En	Location *	LS



Marker located along side of road about 200 yds east of levees



Crossing owner contact info

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

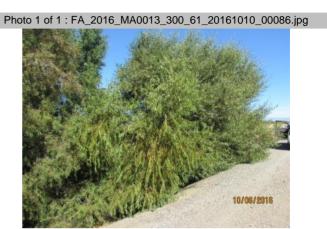
** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM End		Rating **	U	Issue No.		61		
	13.76	Issue Type +	Ма	Location *		LS		
Category Earthen Levee			GPS Latitude/Longitude					
Calegory				Start End				
Item	Trim / Thin Trees				54°	39.416854°		
item			-121.781855 °		-121.781855 °			
DWR ID DWR_MA0013_01_f _ 2016_61								
Comment Code								
T1 : Trim tre	ees to at l	east five feet	above g	round level.				
			•					
Inspector Comment								



View of the overgrown trees and vegetation along the landside slope and toe.

LM Start	13.76	Rating **	М	Issue No.		75
LM End	13.76	Issue Type +	En	Location *		LS
Category	Supplemental			GPS Latitude/Longitude		
Category				Start E		End
Item	DWR UCIP Field Study			39.4168	33°	39.416833°
Rem			-121.7819	30°	-121.781930°	
DWR ID						

Comment Code

Inspector Comment

FS_ID:47677 DS_ID:16338 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

Manual 519, June 1962 (HLM 13.96)] FS Date: 5/4/2016 12:36:00 PM

UCIP Comments: 5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional

Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Photo 1 of 2: UCIP_FA_2016_47677_66970.jpg



WS headwall and flap gate.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	13.76	Rating **	M	Issue No.		75 (cont)			
LM End	13.76	Issue Type +	En	Location *		LS			
Catagory	GPS La	atitud	e/Longitude						
Calegory	Category					End			
Item	DWR UC	IP Field Study		39.4168	33 °	39.416833	0		
пеш				-121.7819	30°	-121.781930	0		
DWR ID									
	Comment Code								

Inspector Comment

FS_ID:47677 DS_ID:16338 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 13.96)] FS Date: 5/4/2016 12:36:00 PM

Photo 2 of 2 : UCIP_FA_2016_47677_66971.jpg



View of channel at crossing.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	13.77	Rating **	М	Issue No.		78
LM End	13.77	Issue Type + En		Location *		LS
Catagony	Suppleme	ental		GPS La	titud	e/Longitude
Calegory	Category					End
Item	DWR UCI	P Field Study		39.4167	56 °	39.416756
пеш				-121.7820	60°	-121.782060
DWR ID						,

Inspector Comment

Comment Code

FS_ID:48050 DS_ID:16339 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/03/2016 ABANDONED CROSSING7/13/2015 Abandoned crossing. Slide gate is buried on the WS.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Non-functional crossing-buried slide gate on WS. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS & LS slopes or toe.This crossing is listed in the USACE periodic inspection report as Corp's Inspection ID# USACE_CESPK_M13D_2011_p_0352 for abandoned gate on WS slope.

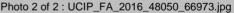
FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel drainage pipe through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 0.25-inch steel plate welded on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.97)]

Manual 519, June 1962 (HLM 13.9 FS Date: 5/4/2016 12:35:00 PM

LM Start	13.77	Rating **	М	Issue No.	78 (cont)
LM End	13.77	Issue Type +	En	Location *	LS



Buried slide gate on the WS slope.





View of LS slope and toe. Unable to find welded plate on LS.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	14.21	Rating **	М	Issue No.		60				
LM End	14.21	Issue Type +	Ma	Location *		LS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Calegory				Start		End				
Vegetation 39.412776 ° 39.4127										
пеш	-121.788573 ° -121.78857									
DWR ID DWR_MA0013_01_f _ 2016_60										
		Comn	nent Cod	de						
V1 : Contro easements		rass and wee	eds on th	e levee slop	pes a	and				
		Inspecto	or Comm	nent						

No Photos

LM Start	14.22	Rating **	М	Issue No.		59				
LM End	14.22	Issue Type +	En	Location *		LS				
Category	Earthen L	evee		GPS L	atitud	e/Longitude				
Calegory				Start		End				
Item	Encroach	ments		39.4127	'26 °	39.412726	0			
пеш				-121.7886	558°	-121.788658	0			
DWR ID DWR_MA0013_01_f _ 2016_59										
		Comn	nent Cod	de						
DE : Debri	S									
		Inspecto	or Comm	nent						

No Photos

CR : Crown

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

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Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	14.58	Rating **	U	Issue No.		85
LM End	14.58	Issue Type +	En	Location *	LS	
Category	Suppleme		GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		39.40948	81 °	39.409481 °
пеш				-121.79401	o°	-121.794010°
DWR ID						

Comment Code

Inspector Comment

FS_ID:49925 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard - afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard - afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)] FS Date: 5/4/2016 12:37:00 PM

LM Start	14.58	Rating **	U	Issue No.	85 (cont)
LM End	14.58	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_49925_66976.jpg

Headwall and flapgate located on water side of levee

Photo 2 of 2: UCIP FA 2016 49925 66974.jpg



Headwall and flapgate located on water side of levee

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

		5 :: ++				
LM Start	15.01	Rating **	М	Issue No.		58
LM End	15.09	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS La	atitud	le/Longitude
Category				Start		End
Item	Vegetatio	n		39.4056	30°	39.404872°
пеш				-121.8002	65°	-121.801491 °
DWR ID DWR_MA0013_01_f _ 2016_58						
		Comn	nent Cod	de		
V1 : Contreasements		grass and wee	eds on th	e levee slo	pes	and
		Inspecto	or Comm	nent		

Photo 1 of 1 : FA_2016_MA0013_300_58_20161010_00085.jpg



View of the dense vegetation along the landside toe.

LM Start	15.58	Rating **	М	Issue No.		57
LM End	15.58	Issue Type +	Ма	Location *		LS
Cotogony	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Slope Stability				80°	39.400380°
пеш				-121.8084	32°	-121.808432 °
DWR ID	DWR_MA0	013_01_f _ 201	6_57			
		Comn	nent Cod	de		
S1 : Repa	ir slope ins	tability.				
		Inspecto	or Comm	nent		

Photo 1 of 1 : FA_2016_MA0013_300_57_20161010_00084.jpg

View of slope instability along the landside slope.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	15.72	Rating **	М	Issue No.		79	
LM End	15.72	Issue Type +	En	Location *		LS	
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.39905	1°	39.399051	٥
пеш				-121.81055	o°	-121.810550	0
DWR ID							

Inspector Comment

Comment Code

FS_ID:48494 DS_ID:16364 EP_NO: 7521

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall.7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.5/22/2014 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48-inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521, 1972 - Askew Ranch) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.95)]

FS Date: 5/26/2016 7:37:21 AM

LM Start	15.72	Rating **	М	Issue No.	79 (cont)
LM End	15.72	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_48494_66989.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 2: UCIP_FA_2016_48494_66987.jpg



View of WS.

Location + Issue Type Ma: Maintenance Deficiancy LS: Land Side N/A: Not Applicable : Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	15.77	Rating **	М	Issue No.		81	
LM End	15.77	Issue Type +	En	Location *		LS	
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.39861	5 °	39.398615°	
пеш				-121.81125	o°	-121.811250°	
DWR ID						·	

Inspector Comment

Comment Code

FS_ID:48059 DS_ID:16373 EP_NO: 11805B

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/03/2016 Crossing was underwater on both sides of levee during this inspection. Looks as if the wodden walkway was the same and no repairs have been made.7/13/2015 LS inlet still underwater. WS screwgate appears in good condition. Wooden wlalkway to the screwgate needs repairs.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 48-inch reinforced concrete irrigation pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on the waterside (WS) of levee. Revetment on the WS slope. Irrigation ditch on the landside (LS). (Permit No. 11805, 11805B, 1979 - Elna Schohr, Inc.) [Additional Reference(s): DWR Levee Log,

FS Date: 5/4/2016 12:59:00 PM

LM Start	15.77	Rating **	М	Issue No.	81 (cont)
LM End	15.77	Issue Type +	En	Location *	LS



WS view of appurtances (catwalk, slide gate, and headwall)

Photo 2 of 2: UCIP_FA_2016_48059_66995.jpg



WS view of catwalk, slide/screw gate, and headwall

Location + Issue Type LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated Ma: Maintenance Deficiancy WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	16.22	Rating **	M	Issue No.		7
LM End	17.17	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroachments			39.3945	23 °	39.385580°
пеш				-121.8176	30°	-121.831282°
DWR ID	DWR_MA0	013_01_s _ 201	2_7			
		Comn	nent Coc	de		
DT : Ditch						
		Inspecto	or Comm	nent		

No Photos

LM Start	16.52	Rating **	М	Issue No.		56
LM End	16.52	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Trim / Thi		39.3916	75°	39.391675°	
пеш		-121.821932° -12				
DWR ID	DWR_MA0	013_01_f _ 201	6_56			
		Comn	nent Cod	de		
T1: Trim t	rees to at	least five feet	above g	round level		
			-			
		Inspecto	or Comm	nent		

Photo 1 of 1: FA_2016_MA0013_300_56_20161010_00083.jpg



View of dense trees along the landside toe.

LM Start	16.88	Rating **	М	Issue No.		55
LM End	16.88	Issue Type +	Ма	Location *		LS
Category Earthen Levee				GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Slope Sta	bility		39.3883	26°	39.388326°
item				-121.8271	37°	-121.827137°
DWR ID	DWR_MA0	013_01_f _ 201	6_55			
		Comn	nent Cod	de		
S1 : Repai	r slope ins	tability.				
		Inspecto	or Comm	nent		

Photo 1 of 1 : FA_2016_MA0013_300_55_20161010_00082.jpg



View of slope instability issue along the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	17.18	Rating **	М	Issue No.	80		
LM End	17.18	Issue Type +	En	Location *	LS		
Supplemental			GPS Latitude/Longitude				
Category	Category			Start		End	
Item	DWR UC	DWR UCIP Field Study			o°	39.385540°	
пеш				-121.831280 °		-121.831280°	
DWR ID							
Comment Code							

Inspector Comment

FS_ID:48057 DS_ID:16371 EP_NO: 3511

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 5/03/2016 Unable to locate.7/13/2015 Unable to locate.5/22/2014 Same as last inspection.12/3/2013 Unable to

locate.7/15/2013 Same as last inspection. Unable to

locate.4/18/2012 Unable to determine if cable is still in use, per permit records indicate communication cable was installed in 1961, 1968 USACE requested to abandon line, 1974 USACE communication is not abandoned. Cable crosses multiple levees.

FIELD_STRUCT_DESC: U.S. Army communication cable through the levee, 3 feet below the crown. (Permit No. 3511, 1961 - US Army Engineer Disrict) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 5/4/2016 1:01:00 PM

LM Start	17.46	Rating **	М	Issue No.		9		
LM End	17.50	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroachi	ments		39.3829	43°	39.382635°		
пеш				-121.835447 °		-121.836012°		
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_9							
		Comn	nent Cod	de				
DT : Ditch								
		Inspecto	or Comm	nent				

No Photos

No Photos

* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

CR: Crown

A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	09/21/2016 10/06/2016	Tariq Chechi

LM Start	17.47	Rating **	М	Issue No.		15		
LM End	17.94	Issue Type +	En	Location *		LS		
Cotogony	Earthen L	evee		GPS La	titud	e/Longitude		
Category				Start		End		
Item	Encroachi	ments		39.3828	52 °	39.378481 °		
пеш				-121.8356	54 °	-121.842394°		
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_15							
		Comn	nent Cod	de				
DT : Ditch								
Inspector Comment								

No Photos

LM Start	18.53	Rating **	М	Issue No.		53
LM End	18.59	Issue Type +	Ma	Location *		WS
Catagory Earthen Levee			GPS Latitude/Longitude			
Category			Start		End	
ltom	Vegetation			39.373165°		39.372718°
Item			-121.850902 °		-121.851840°	
DWR ID DWR_MA0013_01_f _ 2016_53						
Comment Code						

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Photo 1 of 1 : FA_2016_MA0013_300_53_20161010_00081.jpg



View of the dense vegetation along the landside slope and toe.

LM Start	18.58	Rating **	М	Issue No.		54		
LM End	18.58	Issue Type +	Ma	Location *		LS		
Category Earthen Levee			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Item	Animal Co	Animal Control			93°	39.372793	0	
item	item			-121.8516	77°	-121.851677	0	
DWR ID	DWR_MA0	013_01_f _ 201	6_54					
	Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Unit Cover Sheet

Fall 2016 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles
Unit No. 02 Cherokee Canal	Left	22.84

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M *	
Date of Inspection	4/14/2016 - 4/14/2016		9/21/2016 - 10/6/2016	
DWR Inspector	Keith Millard		Tariq Chechi	
Accompanied By	Shawn Freitag Sutter Maintenance Yard		Shawn Freitag Sutter Maintenance Yard	

^{*} Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	0.05	Rating **	М	Issue No.		944	
LM End	0.05	Issue Type +	En	Location *	tion * LS		
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.5738	16°	39.573816°	
пеш				-121.7012	90°	-121.701290°	
DWR ID							

Inspector Comment

Comment Code

FS_ID:50045 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP omagana)4/27/216 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard - afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard - afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID#

USACE_CESPK_M13G_2011_p_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

FS Date: 5/3/2016 12:46:00 PM



Overview looking south on left levee

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	0.05	Rating **	М	Issue No.		944 (cont)			
LM End	0.05	Issue Type +	En	Location *		Location *		LS	
Category				GPS Latitude/Longitude					
Calegory	gory			Start		End			
Item	DWR UCI	P Field Study		39.5738	16°	39.573816	0		
item				-121.7012	90°	-121.701290	0		
DWR ID									

Comment Code

Inspector Comment

FS_ID:50045 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP omagana)4/27/216 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard - afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard - afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0009 for WS flap gate not functioning

USACE_CESPK_M13G_2011_p_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

FS Date: 5/3/2016 12:46:00 PM



Headwall and flap gate on WS. Soil and pipes stockpiled next to headwall.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	0.06	Rating **	М	Issue No.		50
LM End	0.06	Issue Type +	Ma	Location *		WS
Cotogony	Earthen L	evee		GPS La	titud	e/Longitude
Category				Start		End
Item	Trim / Thi	n Trees		39.5736	92 °	39.573692°
item			-121.701286 °		-121.701286°	
DWR ID	DWR ID DWR_MA0013_02_f _ 2016_50					
		Comn	nent Cod	de		
T3 : Trim a flood fight.		es to allow vis	sibility of	the ground	and	I room to
		Inspecto	or Comm	nent		

No Photos

LM Start	0.07	Rating **	М	Issue No.		1	
LM End	0.17	Issue Type +	En	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroach	ments		39.573523°		39.572455°	
пеш				-121.7013	887°	-121.702370	0
DWR ID	DWR_MA0	013_02_s _ 201	12_1				
		Comn	nent Cod	de			
EQ : Equip	ment						
		Inspecto	or Comm	nent			
1							

No Photos

LM Start	0.21	Rating **	M	Issue No.		53		
LM End	0.56	Issue Type +	En	Location *		LS		
Category	Earthen Levee				GPS Latitude/Longitude			
Category				Start		End		
Item	Encroach	croachments			21°	39.566737°		
пеш				-121.7023	72°	-121.702316°		
DWR ID	DWR_MA0	013_02_f _ 201	6_53					
		Comn	nent Cod	de				
AT : Agricu	ıltural tillin	g						
Inspector Comment								
Monitor the	Monitor the tilling to make sure farmer is not encroaching into the levee.							



Photo 1 of 1: FA_2016_MA0013_301_53_20161014_00102.jpg

View of ag tilling at the landside levee toe.

*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

* Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	0.58	Rating **	М	Issue No.		936
LM End	0.58	Issue Type +	En	Location *		LS
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5664	79°	39.566479°
пеш				-121.7024	30°	-121.702430 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:48038 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.57)]

Manual 519, June 1962 (HLM 0.57) FS Date: 5/3/2016 12:49:00 PM

LM Start	0.58	Rating **	М	Issue No.	936 (cont)
LM End	0.58	Issue Type +	En	Location *	LS



Overview looking south

Photo 2 of 2: UCIP_FA_2016_48038_67048.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	1.60	Rating **	U	Issue No.		56
LM End	1.63	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Encroachi	ments		39.5521	95 °	39.551731 °
пеш				-121.7047	'86	-121.704721 °
DWR ID DWR_MA0013_02_s _ 2016_56						
		Comn	nent Cod	de		
DT : Ditch						
		Inspecto	or Comm	nent		



View of the agricultural ditch along the landside toe.

LM Start	1.70	Rating **	М	Issue No.		937
LM End	1.70	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UCIP Field Study				78°	39.551178°
item				-121.7056	60°	-121.705660 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:48039 DS_ID:16399 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 -Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)] FS Date: 5/3/2016 12:53:00 PM

Photo 1 of 2: UCIP_FA_2016_48039_67059.jpg



Overview of crossing

Location + Issue Type N/A: Not Applicable Ma: Maintenance Deficiancy LS: Land Side Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	1.70	Rating **	М	Issue No.		937 (cont)	
LM End	1.70	Issue Type +	En	Location *		LS	
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCIP Field Study			39.5511	78°	39.551178°	
пеш				-121.7056	60°	-121.705660 °	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:48039 DS_ID:16399 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 5/3/2016 12:53:00 PM

UCIP Comments: 4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 -Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)]



View of flap gate on WS.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	2.53	Rating **	М	Issue No.		938	
LM End	2.53	Issue Type +	En	Location *		LS	
Supplemental				GPS Latitude/Longitude			
Calegory	Calegory					End	
Item	DWR UC	P Field Study		39.5391	95 °	39.539195°	
пеш	m				70°	-121.706070°	
DWR ID							
Comment Code							

Inspector Comment

FS_ID:48040 DS_ID:16400 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate.

FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 5/3/2016 12:54:00 PM

LM Start	2.53	Rating **	М	Issue No.	938 (cont)
LM End	2.53	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP_FA_2016_48040_67063.jpg



Overview of levee crown looking south

Photo 2 of 2: UCIP_FA_2016_48040_67068.jpg



View of WS slope.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	2.62	Rating **	М	Issue No.		939		
LM End	2.62	Issue Type +	En	Location *		LS		
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCIP Field Study			39.5378	64 °	39.537864°		
item				-121.7061	90°	-121.706190°		
DWR ID								

Inspector Comment

Comment Code

FS_ID:48042 DS_ID:16402 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 5/3/2016 12:58:00 PM

LM Start	2.62	Rating **	М	Issue No.	939 (cont)
LM End	2.62	Issue Type +	En	Location *	LS



Overview looking south from left levee

Photo 2 of 2: UCIP_FA_2016_48042_67076.jpg



Headwall and flap gate located on WS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	2.63	Rating **	М	Issue No.		940		
LM End	2.63	Issue Type +	En	Location *		LS		
Category				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P Field Study		39.53767	71 °	39.537671 °		
пеш				-121.7062	10°	-121.706210 °		
DWR ID								
	Comment Code							

Inspector Comment

FS_ID:48043 DS_ID:16403 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment

and needs to be cleaned.5/29/2014 Same as last

inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)]

FS Date: 5/3/2016 1:01:00 PM

LM Start	2.63	Rating **	М	Issue No.	940 (cont)
LM End	2.63	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_48043_67087.jpg



Overview at levee crown looking south

Photo 2 of 2: UCIP_FA_2016_48043_67084.jpg



Headwall and flap gate located on WS

CR : Crown

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	2.65	Rating **	М	Issue No.		930	
LM End	2.65	Issue Type +	En	Location *		LS	
Supplemental			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCI	P Field Study		39.5374	66 °	39.537466°	
item			-121.7062	40°	-121.706240°		
DWR ID							

Inspector Comment

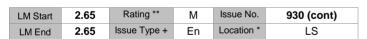
Comment Code

FS_ID:48048 DS_ID:16415 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

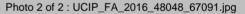
UCIP Comments: 4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 5/3/2016 1:02:00 PM





Overview looking south from left levee





Headwall and flap gate located on WS.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	3.59	Rating **	М	Issue No. 913		913			
LM End	3.59	Issue Type +	En	Location *	Location *		LS		
Supplemental			GPS Latitude/Longitude						
Calegory	Category			Start		End			
ltom	DWR UCI	P Field Study		39.52382	9°	39.523829	0		
пеш	Item				o°	-121.706290	0		
DWR ID									
	Comment Code								

Inspector Comment

FS_ID:47735 DS_ID:16405 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function. 7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13G 2011 p 0172 for no access to WS gate due to high water & dense vegetation. FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)] FS Date: 5/3/2016 1:04:00 PM

Photo 1 of 2: UCIP_FA_2016_47735_67094.jpg



Overview looking south from left levee

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	3.59	Rating **	М	Issue No.	913 (cont)			
LM End	3.59	Issue Type +	En	Location * LS		LS		
Supplemental				GPS Latitude/Longitude				
Category			Start		End			
Item	DWR UCI	P Field Study		39.523829°		39.523829°		
пеш				-121.70629	00°	-121.706290 °		
DWR ID								
Comment Code								

Inspector Comment

FS_ID:47735 DS_ID:16405 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function. 7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13G 2011 p 0172 for no access to WS gate due to high water & dense vegetation. FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)] FS Date: 5/3/2016 1:04:00 PM

Photo 2 of 2: UCIP_FA_2016_47735_67095.jpg



Flap gate submerged in water on WS of levee

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	3.83	Rating **	М	Issue No.		929
LM End	3.83	Issue Type +	En	Location *		LS
Supplemental			GPS Latitude/Longitude			
Category			Start		End	
Item	DWR UCI	P Field Study		39.5243	50°	39.524350°
item			-121.7021	80°	-121.702180 °	
DWR ID						

Comment Code

Inspector Comment FS_ID:48046

DS_ID:16847 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)] FS Date: 5/3/2016 1:09:00 PM

LM Start	3.83	Rating **	М	Issue No.	929 (cont)
LM End	3.83	Issue Type +	En	Location *	LS



Overview looking south on left levee



Headwall and flap gate located on WS toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	4.04	Rating **	М	Issue No.		911		
LM End	4.78	Issue Type +	En	Location *	WS			
Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start		End		
Item	Encroachi	ments		39.5266	553°	39.534091 °		
item				-121.6996	75°	-121.690404°		
DWR ID DWR_MA0013_02_s _ 2012_911								
Comment Code								
DT : Ditch								
			•					
		Inspecto	or Comm	nent				

Photo 1 of 1: FA_2016_MA0013_301_911_20160823_00017.jpg

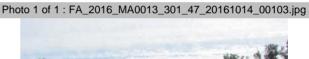


View of agricultural ditch along the toe.

LM Start	4.80	Rating **	М	Issue No.		47	
LM End	5.01	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory	zategory					End	
Item	Vegetatio	n		39.5269	24°	39.526272°	
пеш				-121.6848	02°	-121.688169°	
DWR ID	DWR ID DWR_MA0013_02_f _ 2016_47						
Comment Code							

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment





View of dense vegetation at the landside levee toe.

LM Start	5.16	Rating **	М	Issue No.	48		
LM End	5.35	Issue Type +	Ma	Location *	LS		
Category	evee	GPS La	atitud	le/Longitude			
Calegory				Start	End		
Item	Vegetatio	n		39.526930°		39.525429	
пеш				-121.6905	77°	-121.693503	
DWR ID DWR_MA0013_02_f _ 2016_48							
	Comment Code						

Inspector Comment

V1 : Control annual grass and weeds on the levee slopes and

easements.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	5.29	Rating **	М	Issue No.	925		
LM End	5.29	Issue Type +	En	Location *		LS	
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR UCI	P Field Study		39.5259	58°	39.525958°	
пеш				-121.6927	30°	-121.692730 °	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:47723 DS_ID:16409 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last

inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to

overgrown vegetation on WS flap gate.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)]

FS Date: 5/3/2016 1:32:00 PM

LM Start	5.29	Rating **	М	Issue No.	925 (cont)
LM End	5.29	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_47723_67146.jpg



Overview of crossing looking downstream.

Photo 2 of 2: UCIP_FA_2016_47723_67149.jpg



View of WS headwall with dense vegetation in channel.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	5.36	Rating **	М	Issue No.		926		
LM End	5.36	Issue Type +	En	Location *		LS		
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.5253	61 °	39.525361	0	
item				-121.6936	30°	-121.693630	0	
DWR ID								

Comment Code

Inspector Comment

FS_ID:47724 DS_ID:16410 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/27/2016 Pipe appears abandoned. Should be removed.6/30/2015 Pipe still present with the cap on the waterside.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS.

FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterside (WS) end. Open on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.41)]

FS Date: 5/3/2016 1:50:00 PM

LM Start	5.36	Rating **	М	Issue No.	926 (cont)
LM End	5.36	Issue Type +	En	Location *	LS



Overview of site



Capped irrigation pipe located on water side of levee

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	5.71	Rating **	М	Issue No.		49	
LM End	5.71	Issue Type +	Ма	Location *	WS		
Category	evee	GPS La	atitud	e/Longitude			
Calegory	egory					End	
Item	Erosion / I	39.523803 °		39.523803°			
пеш				-121.6998	04°	-121.699804°	
DWR ID	DWR_MA0	013_02_f _ 201	6_49				
Comment Code							
E2 : Schedule repair of erosion site prior to the next inspection.							

· · · · · ·

Inspector Comment

1' by 2' by 4' hole in the levee toe that appears to be a temporary pump intake.

Photo 1 of 1: FA_2016_MA0013_301_49_20161014_00104.jpg



View of the man made hole at the waterside levee toe.

LM Start	5.80	Rating **	М	Issue No.		945
LM End	5.80	Issue Type +	En	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5233	81 °	39.523381 °
пеш				-121.7012	70°	-121.701270°
DWR ID						·

Comment Code

Inspector Comment

FS_ID:50046 DS_ID:16411 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP - omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR Sutter Yard - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.85)]

FS Date: 5/3/2016 1:57:00 PM



Overview looking south

* Location	** Rating		+ Issue Type	
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy	
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	
TI / D / 00 0040 40 50			•	 47 (55

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	5.80	Rating **	М	Issue No.		945 (cont)		
LM End	5.80	Issue Type +	En	Location *		WS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.52338	31 °	39.523381 °		
пеш				-121.70127	70°	-121.701270°		
DWR ID						·		

Comment Code Inspector Comment

FS_ID:50046 DS_ID:16411 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP - omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR Sutter Yard - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.85)]

FS Date: 5/3/2016 1:57:00 PM

Photo 2 of 2: UCIP_FA_2016_50046_67157.jpg



Headwall and flap gate on WS.

							_	
LM Start	6.12	Rating **	М	Issue No.		55		
LM End	6.12	Issue Type +	Ma	Location *	LS			
Category	Earthen Levee GPS Latitude/Longitude							
Calegory		Start En						
Item	Encroach	ments		39.5216	34°	39.521634	0	
item				-121.70618	34 °	-121.706184	0	
DWR ID DWR_MA0013_02_s _ 2014_55								
	Comment Code							

TR: Tree or limb

Inspector Comment

Remove the tree limbs from the landside slope.

Photo 1 of 1: FA_2016_MA0013_301_55_20160823_00014.jpg



View of the tree limbs on the landside slope and toe.

* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable
N: Not Inspected/Rated
N: Not Inspected/Rated
C: Corrected
C: Corrected
U: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	6.18	Rating **	М	Issue No.		12		
LM End	7.54	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroachi	ments		39.5208	43°	39.502958°		
пеш				-121.7063	45°	-121.716953 °		
DWR ID	DWR ID DWR_MA0013_02_s _ 2012_12							
		Comn	nent Cod	de				
DT : Ditch								
		Inspecto	or Comm	nent				



View of the agricultural ditch along the toe.

LM Start	7.18	Rating **	М	Issue No.		927	
LM End	7.18	Issue Type +	En	Location *		LS	
Category	ental	GPS Latitude/Longitude					
Category				Start		End	
Item	DWR UCIP Field Study			39.5075	70°	39.507570°	
пеш				-121.7138	70°	-121.713870°	
DWR ID							
		Comp	ant Coc	ما			

Inspector Comment

FS ID:47732 DS_ID:17518 EP_NO: 5200B

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/29/2014 Same as last inspection.12/9/2013 Unable to

locate.7/09/2013 Same as last inspection. Unable to locate.4/24/2012 Not found - Need to verify if there are any signs of the structure during next inspection when slopes are cleared. If not will need to coordinate with applicant regarding the fate of this structure. FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee embankment, unknown depth below the crown. (Permit No. 5200B, 1967 - Richvale Irrigation District) Additional permits related to this structure include Permit No. 5200 and 5200A. FS Date: 5/3/2016 2:11:00 PM

No Photos

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	8.30	Rating **	М	Issue No.		928	
LM End	8.30	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.4938	50°	39.493850	0
item				-121.7247	80°	-121.724780	0
DWR ID						,	

Inspector Comment

Comment Code

FS_ID:47733 DS_ID:16413 EP_NO: 14704

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition. Unusre on the permit issues below.11/4/2014 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39). FIELD_STRUCT_DESC: Steel fiber optic cable through the levee, approximately 3.5 feet below the crown. The cable section across the channel is attached to the Cherokee Canal Dridge. (Permit No. 14704, 1987 - Sprint) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 5/3/2016 2:11:00 PM

LM Start	8.30	Rating **	М	Issue No.	928 (cont)
LM End	8.30	Issue Type +	En	Location *	LS



Buried cable box located on the LS edge.



WS view cable line attached to highway bridge.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	8.30	Rating **	М	Issue No.		912
LM End	8.30	Issue Type +	En	Location *		LS
Category	Suppleme		GPS Latitude/Longitude			
Calegory	alegory					End
Item	DWR UCI	P Field Study		39.49378	30°	39.493780°
пеш				-121.7248	40 °	-121.724840 °
DWR ID						·

Inspector Comment

Comment Code

FS_ID:47734 DS_ID:16404 EP_NO: 10589A Repair Type: Non-

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears in good condition. Unsure on the permit issues listed below.11/4/2014 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).

FIELD_STRUCT_DESC: 4-inch steel communication pipe, contains three telephone cables, through the levee, approximately 4 feet below the crown. The cable through the channel is buried approximately 5 feet deep. (Permit No. 10589, 1987 - Pacific Telephone and Telegraph Company [PT&T]) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 5/3/2016 2:12:00 PM

LM Start	8.30	Rating **	М	Issue No.	912 (cont)
LM End	8.30	Issue Type +	En	Location *	LS



Buried cable box located on the landside edge.



Waterside view of utility line alignment through levee then attached to bridge.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	9.22	Rating **	С	Issue No.		57			
LM End	9.22	Issue Type +	Ma	Location *		CR			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Crown Su	ssions /	39.4817	'14 °	39.481714	۰			
item	Rutting			-121.7322	10°	-121.732210	۰		
DWR ID	DWR ID DWR_MA0013_02_s _ 2016_57								
		Comn	nent Cod	de					
C3 : Add a	ppropriate	gravel or road	d base.	Grade and	com	ipact.			
	Inspector Comment								

No Photos

LM Start	9.66	Rating **	М	Issue No.		914
LM End	9.66	Issue Type +	En	Location *		CR
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory	Salegory			Start		End
Item	DWR UCI	P Field Study		39.4762	60°	39.476260°
пеш				-121.7362	30°	-121.736230°
DWR ID						

Comment Code

Inspector Comment

FS_ID:47742 DS_ID:18912 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.1/24/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.

FIELD_STRUCT_DESC: Buried communication line of unknown material through the levee at an unknown depth below the crown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601 as indicated by marker. (Qwest Communication) No permit has been identified since crossing was field discovered in 2012. FS Date: 5/3/2016 2:17:00 PM



Overview of levee crown at crossing.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	9.66	Rating **	М	Issue No.		914 (cont)	
LM End	9.66	Issue Type +	En	Location *		CR	
Category			GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR UCI	DWR UCIP Field Study			60°	39.476260	•
itelli				-121.73623	30°	-121.736230	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:47742 DS_ID:18912 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.

FIELD_STRUCT_DESC: Buried communication line of unknown material through the levee at an unknown depth below the crown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601 as indicated by marker. (Qwest Communication) No permit has been identified since crossing was field discovered in 2012.

FS Date: 5/3/2016 2:17:00 PM



Marker for buried fiber optic cable on WS.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	9.67	Rating **	М	Issue No.		915
LM End	9.67	Issue Type +	En	Location *		CR
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.4761	40 °	39.476140
item				-121.7363	90°	-121.736390
DWR ID						

Comment Code

Inspector Comment

FS_ID:47743 DS_ID:18913 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

FS Date: 5/3/2016 2:18:00 PM

UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. But still unknown if this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/9/2013 Same as last inspection.4/24/2012 Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional info. Inquiries pertaining to inspeciton submit to pipelineinquiries@kindermorgan.com and reference as Engr Station 3173+48 plus include coordinates. FIELD_STRUCT_DESC: 8-inch high pressure line bored through through the levee at depth unknown. Kinder Morgan is the owner of line--contact information is 213.624-9461 or Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com. Additional contact is Ken Yeo, Sacramento Local Area Manager, at 916.416.7938 or by email yeok@kindermorgan.com. Frank Villalovos is the primary contact for this crossing. No permit has been identified since crossing was field discovered in 2012.

LM Start	9.67	Rating **	М	Issue No.	915 (cont)
LM End	9.67	Issue Type +	En	Location *	CR



Overview of levee crown at crossing.

Photo 2 of 2: UCIP_FA_2016_47743_67294.jpg



WS marker with utility contact information.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	9.69	Rating **	М	Issue No.		916
LM End	9.69	Issue Type +	En	Location *		CR
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.4759	60°	39.475960°
item				-121.7365	40 °	-121.736540°
DWR ID						

Comment Code

Inspector Comment

FS_ID:47744 DS_ID:18914 EP_NO: N/A

LM Start

LM End

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. It is still unknown wheter this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if permit exist for this crossing

FIELD_STRUCT_DESC: Underground communication cable through the levee, depth unknown below the crown. Owner of encroachment is Pacific Telephone. No permit has been identified since crossing was field discovered in 2012.

М

En

Issue No.

Location '

Rating **

Issue Type +

FS Date: 5/3/2016 2:20:00 PM 9.69

9.69

OF a		STOP
		A STATE OF THE STA
	Manual Control of the	
	Overview of levee crown at cro	ssina.

Photo 1 of 2: UCIP_FA_2016_47744_67299.jpg



Marker located on LS.

916 (cont)

CR

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	9.88	Rating **	М	Issue No.		917	
LM End	9.88	Issue Type +	En	Location *		CR	
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.4734	10°	39.473410°	
пеш			·			-121.738190°	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:47745 DS_ID:17731 EP_NO: 16994

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/28/2014 Same as last inspection.12/4/2013 Unable to locate.7/09/2013 Same as last inspection. Unable to locate any signs of this crossing.4/24/2012 Unable to find any indicators for this crossing. It appears that this encroachment was not built. Check again

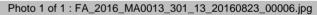
during next inspection.

FIELD_STRUCT_DESC: 10-inch high-density polyethylene (HDPE) communication conduit through the levee, unknown depth below the crown. Conduit contains fiber-optic cables that goes across and under (bored) Cherokee Canal and its levees. Twelve inner ducts through casing with hand holes placed at each end for initial and future installation of fiber optic telecommunications cable. (Permit No. 16994, 2000 - Level 3 Comm)

FS Date: 5/3/2016 2:21:00 PM

LM Start	10.03	Rating **	М	Issue No.		13			
LM End	10.52	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Item	Encroachi	ments		39.4715	17°	39.465113°			
пеш				-121.7394	33°	-121.743592°			
DWR ID	DWR_MA0	013_02_s _ 201	12_13						
		Comn	nent Cod	de					
DT : Ditch									
			_						
Inspector Comment									

No Photos





View of the agricultural ditch along the toe.

: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	10.55	Rating **	М	Issue No.		918				
LM End	10.55	Issue Type +	En	Location *		LS				
Category	Supplemental				Supplemental				atitud	e/Longitude
Calegory						End				
Item	DWR UCI	P Field Study		39.4647	10°	39.464710 °				
пеш			-121.7438	10°	-121.743810 °					
DWR ID										

Inspector Comment

Comment Code

FS_ID:47746 DS_ID:16406 EP_NO: 1238

Repair Type: Non-Urgent Crossing Status: Indicator Found

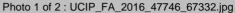
UCIP Comments: 4/26/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears in good condition. 5/28/2014 Same as last inspection.12/4/2013 Same as last

inspection.7/08/2013 Same as last inspection.4/24/2012 Permit was approved for 6-5/8 inch diameter not 8 inch. The permit granted permission to construct pipe to cross Cherokee Canal, Butte Creek, Clear Creek, & Ash Creek. The O&M manual list an 8 inch steel gas line at HLM 10.67, unable to determine if the gas line is the same crossing. Will need to contact applicant to obtain records.

FIELD_STRUCT_DESC: 8-inch steel gas pipe through the levee at an unknown depth below the crown. Utility marker visible at the upstream and downstream face of highway bridge and along highway. Buried utility crosses bridge and crosses left bank of Cherokee Canal downstream of highway bridge. USA marking on highway indicate 6" STL LN 151. (Permit No. 1238, 1947 - Pacific Gas and Electric Company [PG&E]) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 10.67)] FS Date: 5/3/2016 2:23:00 PM

1.3 Date: 3/3/2010 2.23.00 FW

LM Start	10.55	Rating **	М	Issue No.	918 (cont)
LM End	10.55	Issue Type +	En	Location *	LS





Utility marker is located near the upstream face of the highway bridge.

Photo 2 of 2: UCIP_FA_2016_47746_67333.jpg



Utility is angled. Alignment crosses highway.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	10.56	Rating **	M	Issue No.		931			
LM End	10.56	Issue Type +	En	Location *		LS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UC	IP Field Study		39.4645	90°	39.464590°			
пеш				-121.7439	10°	-121.743910°			
DWR ID									

Comment Code

Inspector Comment

FS_ID:48065 DS_ID:16472 EP_NO: 10939

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/26/2016 Pole within the channel not removed per permit description.6/30/2015 same as last inspection.5/28/2014

Same as last inspection.12/4/2013 Same as last

inspection.7/08/2013 Same as last inspection.4/24/2012 According to permit the existing pole and buried cable in the overflow area were to be removed. Pole is present in the channel.

FIELD_STRUCT_DESC: Reroute a buried wire across the left bank levee of Cherokee Canal at State Highway 162 Bridge abutment from that point to the downstream side of the bridge. From there the wire extends to the gaging station at the center of the bridge. The facility maintains service to the Department of Water Resources' Metering Station midspan of the bridge. (Permit No. 10939, 1976 - Pacific Telephone and Telegraph Company [PT&T])

FS Date: 5/3/2016 2:26:00 PM

Photo 1 of 1: UCIP_FA_2016_48065_67334.jpg



Pole within the channel was not removed.

LM Start	10.59	Rating **	М	Issue No.		18			
LM End	11.66	Issue Type +	En	Location *		LS			
Category	Earthen Levee					GPS Latitude/Longitude			
Calegory				Start		End			
Item	Encroach	ments		39.4643	05 °	39.450333°			
пеш				-121.7441	72°	-121.753157°			
DWR ID	DWR_MA0	013_02_s _ 201	12_18						
		Comn	nent Cod	de					
DT : Ditch									
	Inspector Comment								

Photo 1 of 1: FA_2016_MA0013_301_18_20160823_00007.jpg



View of the agricultural ditch along the toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	12.88	Rating **	М	Issue No.		919
LM End	12.88	Issue Type +	En	Location *		LS
Category	Supplemental				atitud	le/Longitude
Calegory			Start		End	
Item	DWR UCI	P Field Study	39.4347	79°	39.434779	
пеш			,			-121.763940
DWR ID						

Inspector Comment

Comment Code

FS_ID:47748 DS_ID:16385 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)]
FS Date: 5/3/2016 2:27:00 PM

LM Start	12.88	Rating **	М	Issue No.	919 (cont)
LM End	12.88	Issue Type +	En	Location *	LS



Overview of crossing looking downstream at the left bank of Cherokee Canal.

Photo 2 of 2 : UCIP_FA_2016_47748_67337.jpg



Stand pipe with screw gate WS

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	13.40	Rating **	М	Issue No.		19				
LM End	16.00	Issue Type +	En	Location *		Location *		Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Category				Start		End				
Item	Encroach	ments		39.4281	92°	39.414202°				
пеш			-121.768443 °		-121.781863 °					
DWR ID DWR_MA0013_02_s _ 2012_19										
		Comn	nent Cod	de						
DT : Ditch										
			_							
		Inspect	or Comm	nent						



View of the agricultural ditch along the toe.

LM Start	15.37	Rating **	М	Issue No.		60	
LM End	15.37	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Vegetation Vegetation			39.419957°		39.419957°	
пеш				-121.7727	00°	-121.772700 °	
DWR ID DWR_MA0013_02_f _ 2016_60							
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Tules on the landside toe.

Photo 1 of 1: FA_2016_MA0013_301_60_20161014_00105.jpg



View of dense tules along the landside toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	15.44	Rating **	М	Issue No.		932
LM End	15.44	Issue Type +	En	Location *		LS
Catagony	Supplemental			GPS Latitude/Longitude		
Calegory	Category			Start		End
Itom	DWR UCI	P Field Study		39.4192	09°	39.419209°
Item		-121.773680°		-121.773680°		
DWR ID						

Comment Code

Inspector Comment

FS_ID:48066 DS_ID:16376 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end.

5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.62)]

FS Date: 5/3/2016 2:30:00 PM

LM Start	15.44	Rating **	М	Issue No.	932 (cont)
LM End	15.44	Issue Type +	En	Location *	LS



Overview of crossing looking downstream at the left bank of Cherokee Canal.



Dense vegetation covering the majority of the WS. WS headwall difficult to see through dense vegetation.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

M : Minimally Acceptable CR : C : Corrected

U : Unacceptable AW : Acceptable but Monitor & Maintain

** Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	15.63	Rating **	М	Issue No.		63		
LM End	15.63	Issue Type +	Ма	Location *	Location *		Location *	
Category Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Animal Co	ontrol		39.4174	70°	39.417470°		
пеш				-121.776559°		-121.776559°		
DWR ID DWR_MA0013_02_f _ 2016_63								
		Comn	nent Cod	de				
A3 : No roccompact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and		
		Inspecto	or Comm	nent				



View of the rodent holes along the landside slope.

LM Start	15.68	Rating **	М	Issue No.		920	
LM End	15.68	Issue Type +	Issue Type + En Loca			LS	
Category	Catagory Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCI	DWR UCIP Field Study			43°	39.417043°	
пеш				-121.7772	40°	-121.777240°	
DWR ID							

Comment Code

Inspector Comment

FS_ID:47751 DS_ID:16382 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.7/08/2013 Same as last inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 5/3/2016 2:32:00 PM



Overview of crossing looking downstream of the left bank of Cherokee

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	15.68	Rating **	М	Issue No.	9	920 (cont)			
LM End	15.68	Issue Type +	En Location			LS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.4170	43°	39.417043°			
пеш				-121.7772	40°	-121.777240°			
DWR ID									

Inspector Comment

Comment Code

FS_ID:47751 DS_ID:16382 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted

shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013

Same as last inspection.7/08/2013 Same as last

inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 5/3/2016 2:32:00 PM



View of WS slope. Limited inspection due to the dense vegetation.

LM Start	15.97	Rating **	С	Issue No.		61			
LM End	15.97	Issue Type +	Ma	Location *		WS			
Category	Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End			
Item	Encroach	ments		39.4144	48°	39.414448	0		
пеш				-121.7815	32°	-121.781532	0		
DWR ID	DWR_MA0	013_02_s _ 201	15_61						
		Comn	nent Cod	de					

TR: Tree or limb

Inspector Comment

Remove the tree from the waterside slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	15.98	Rating **	U	Issue No.		64	
LM End	15.98	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atituc	le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		39.4143	97°	39.414397°	
item				-121.7815	96°	-121.781596°	
DWR ID	DWR_MA0	013_02_f _ 201	6_64				
		Comn	nent Cod	de			
A3 : No roccompact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and	
		Inspecto	or Comm	nent			



View of the rodent holes along the landside slope.

LM Start	16.02	Rating **	M	Issue No.		65	
LM End	16.02	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		39.4140	21 °	39.414021 °	
пеш				-121.7821	99°	-121.782199°	
DWR ID	DWR_MA0	013_02_f _ 201	6_65				
		Comn	nent Cod	de			
DE : Debri	S						
	Inspector Comment						

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	16.07	Rating **	М	Issue No.		921
LM End	16.07	Issue Type + En Location *			LS	
Category	GPS La	atitud	e/Longitude			
Calegory				Start		End
Item	DWR UCI	P Field Study		39.4135	95 °	39.413595 °
item				-121.7828	90°	-121.782890 °
DWR ID						

Inspector Comment

Comment Code

FS_ID:47752 DS_ID:16377 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. 5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.

FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]

FS Date: 5/3/2016 2:34:00 PM



Overview of levee crown.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	16.07	Rating **	М	Issue No.		921 (cont)	
LM End	16.07	Issue Type + En Lo		Location *	Location *		
Category	GPS Latitude/Longitude						
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.4135	95 °	39.413595	0
item				-121.7828	90°	-121.782890	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:47752 DS_ID:16377 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. 5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.

FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]

FS Date: 5/3/2016 2:34:00 PM



Appurtances on WS

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	16.52	Rating **	U	Issue No.		54	
LM End	16.52	Issue Type +	Ма	Location *		WS	
Catagoni	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Animal Co	ontrol		39.4095	48°	39.409548°	
пеш				-121.789668 °		-121.789668°	
DWR ID DWR_MA0013_02_f _ 2014_54							
		Comn	nent Cod	de			
	dents visib or grout bur	le, but rodent rows.	burrows	visible; ne	ed to	backfill and	
		Inspecto	or Comm	nent			



View of the rodent holes along the waterside slope.

LM Start	16.82	Rating **	М	Issue No.		66	
LM End	16.82	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		39.4068	11°	39.406811°	
пеш				-121.7940	18°	-121.794018°	
DWR ID	DWR_MA0	013_02_f _ 201	6_66				
		Comn	nent Cod	de			
DE : Debri	s						
			_				
		Inspecto	or Comm	nent			
Remove th	Remove the barb wire from the waterside slope.						

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	16.86	Rating **	М	Issue No.		922	
LM End	16.86	Issue Type +	En	Location *	LS		
Category Supplemental GPS Latitude/Longitude						le/Longitude	
Calegory			Start End				
Itom	DWR UCI	P Field Study		39.4064	10°	39.406410°	
пеш	Item -121.7					-121.794600°	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:47753 DS_ID:16841 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/26/2016 Unable to locate.6/30/2015 Unable to locate.5/28/2014 Same as last inspection.12/4/2013 Unable to

locate.7/08/2013 Same as last inspection. Unable to

locate.4/24/2012 Dense vegetation limited inspection will need to verify is an features are still present at this location during the next inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee at approximately 14.5 feet below the crown. Flap gate located on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.06)]

FS Date: 5/3/2016 2:39:00 PM

Photo 1 of 1 : FA	_2016_MA0013_301	_20_20160823_00009.jpg

No Photos



View of the agricultural ditch along the toe.

LM Start	16.89	Rating **	М	Issue No.		20		
LM End	18.72	Issue Type +	En	Location *		LS		
Category	Earthen Levee GPS Latitude/Longitude							
Calegory				Start		End		
Item	Encroachi	ments		39.4062	17°	39.389187°		
пеш				-121.7949	45°	-121.821233°		
DWR ID	DWR_MA0	013_02_s _ 201	2_20					
		Comn	nent Cod	de				
DT : Ditch								
		Inspecto	or Comm	nent				

* Location N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	17.41	Rating **	N	Issue No.		67			
LM End	17.41	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Trim / Thi	n Trees		39.4013	31 °	39.401331°			
пеш				-121.8024	80°	-121.802480 °			
DWR ID	DWR_MA0	013_02_f _ 201	6_67						
		Comn	nent Cod	de					
T5 : Tree s	stumps.								
		Inspecto	or Comm	nent					
Approximately eight stumps on the landside toe.									

No Photos

Rating ** Issue No. LM Start 17.53 68 17.60 Issue Type + Location * LS LM End Ма Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 39.400232° 39.399603° -121.804173° -121.805123° DWR_MA0013_02_f _ 2016_68 Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Tules on the landside toe.

No Photos

LM Start	17.64	Rating **	М	Issue No.	69			
LM End	17.64	Issue Type +	Ma	Location *	LS			
Category	evee		GPS La	titud	le/Longitude			
Calegory	Category					End		
Item	Slope Stability			39.3991	64°	39.399164°		
пеш				-121.8057	87°	-121.805787°		
DWR ID	DWR_MA0	013_02_f _ 201	6_69					
		Comn	nent Coo	le				
S1 : Repair slope instability.								
	Inspector Comment							

Photo 1 of 1: FA_2016_MA0013_301_69_20161014_00109.jpg



View of slope instability issue along the landside slope.

* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated
M: Monimally Acceptable
C: Corrected
D: Unacceptable
AW: Acceptable but Monitor & Maintain

** Rating
A: Acceptable
N: Not Inspected/Rated
C: Corrected
C: Corrected
D: Unacceptable
AW: Acceptable but Monitor & Maintain
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	17.90	Rating **	М	Issue No.		70		
LM End	17.90	Issue Type +	Ma	Location *		LS		
Category	Earthen L	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Animal Co	ontrol		39.3968	° 90	39.396809°		
пеш				-121.8094	22°	-121.809422 °		
DWR ID DWR_MA0013_02_f _ 2016_70								
		Comn	nent Cod	le				
A3 : No ro compact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and		
		Inspecto	or Comm	ent				



View of the rodent holes along the landside slope.

LM Start	17.93	Rating **	М	Issue No.		71
LM End	17.93	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory	ategory					End
Item	Animal Co	ontrol		39.3964	65 °	39.396465°
пеш				-121.8099	35°	-121.809935 °
DWR ID DWR_MA0013_02_f _ 2016_71						

Comment Code A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Photo 1 of 1: FA_2016_MA0013_301_71_20161014_00111.jpg



View of the rodent holes along the landside slope.

LM Start	19.37	Rating **	М	Issue No.		21		
LM End	19.92	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachi	ments		39.3832	52°	39.378192°		
item				-121.8305	65°	-121.838543°		
DWR ID	DWR_MA0	013_02_s _ 201	12_21					
		Comn	nent Cod	de				
DT : Ditch								
Inspector Comment								



View of the agricultural ditch along the toe.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable AW: Acceptable but Monitor & Maintain Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	19.92	Rating **	М	Issue No.		923	
LM End	19.92	Issue Type +	En	Location *		LS	
Category	Supplemental			GPS Lat	tud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.37819	3°	39.378198	0
пеш				-121.83857	o°	-121.838570	0
DWR ID							

Inspector Comment

Comment Code

FS_ID:47758 DS_ID:16375 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 Erosion still present behind the WS

headwall. The rest of the crossing appears in good

condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)]

FS Date: 5/3/2016 2:45:00 PM

LM Start	19.92	Rating **	М	Issue No.	923 (cont)
LM End	19.92	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_47758_67401.jpg



Erosion behind WS headwall looking at the downstream edge of headwall.

Photo 2 of 2: UCIP_FA_2016_47758_67400.jpg



Erosion behind WS headwall at the upstream edge of headwall.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	19.94	Rating **	M	Issue No.		72
LM End	20.09	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	titud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		39.3780	11 °	39.376318°
пеш				-121.8388	59°	-121.840541 °
DWR ID	DWR_MA0	013_02_f _ 201	6_72			
		Comn	nent Cod	de		
V1 : Contro easements		rass and wee	ds on th	e levee slop	es	and
		Inspecto	or Comm	nent		
Tules on the landside toe.						

No Photos

LM Start	20.43	Rating **	М	Issue No.		6
LM End	20.74	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Trim / Thi	n Trees		39.3730	91°	39.370795°
пеш				-121.8452	25°	-121.850124°
DWR ID	DWR_MA0	013_02_s _ 20 ⁴	13_6			
		Comn	nent Coc	de		
T1 : Trim trees to at least five feet above ground level.						
Inspector Comment						

Photo 1 of 1 : FA_2016_MA0013_301_6_20160823_00002.jpg



View of the overgrown trees along the landside slope.

LM Start	20.45	Rating **	С	Issue No.	51		
LM End	20.45	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroach	Encroachments		39.3729	12°	39.372912	0
пеш				-121.8455	00°	-121.845500	0
DWR ID	DWR_MA0	013_02_s _ 201	15_51				
		Comn	nent Cod	de			
TR : Tree	or limb						

Inspector Comment

Remove the tree limbs from the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

		D 11 ++		1		
LM Start	20.52	Rating **	М	Issue No.		73
LM End	20.52	Issue Type +	Ma	Location *	LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Encroachments			39.3724	86°	39.372486°
item				-121.8465	37°	-121.846537 °
DWR ID	DWR_MA0	013_02_f _ 201	6_73			
		Comn	nent Cod	de		
TR : Tree	or limb					
		Inspecto	or Comm	nent		
Remove the tree limbs from the landside slope and toe.						

Photo 1 of 1 : FA_2016_MA0013_301_73_20161014_00112.jpg

View of the tree limbs along the landside levee toe.

LM Start	20.65	Rating **	М	Issue No.		52	
LM End	20.65	Issue Type +	Ma	Location *	LS		
Earthen Levee			GPS La	tituc	le/Longitude		
Category	ıy			Start		End	
Item	Encroach	ments		39.37143	33°	39.371433°	
пеш				-121.8487	53°	-121.848753 °	
DWR ID	DWR_MA0013_02_s _ 2014_52						
Comment Code							

TR: Tree or limb

Inspector Comment

Remove the tree limbs from the landside slope and toe.



View of the tree limbs along the landside toe.

LM Start	20.74	Rating **	N	Issue No.		74
LM End	20.74	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		39.3707	'96 °	39.370796 °
пеш				-121.8501	24°	-121.850124 °
DWR ID	DWR_MA0	013_02_f _ 201	6_74			
		Comn	nent Coo	de		
T5 : Tree s	stumps.					
		Inspecto	or Comm	nent		

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	20.76	Rating **	U	Issue No.		941		
LM End	20.76	Issue Type +	En	Location *	LS			
Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP Field Study		39.3706	76°	39.370676	0		
пеш				-121.8504	90°	-121.850490	0	
DWR ID								

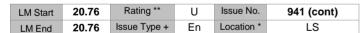
Comment Code

Inspector Comment

FS_ID:49926 DS_ID:16383 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - afreitag)6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/8/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/19/2012 LS pipe collars severely damaged--section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired; will need to coordinate with applicant. WS slide gate handle missing. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 1 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 5/3/2016 2:49:00 PM





Corrugated metal pipe risers with slide gates located on WS slope.



Corrugated metal pipe riser for pipe 1 of 3. Slide gate is missing handle.

*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain Enforcement

* Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	20.76	Rating **	U	Issue No.		942		
LM End	20.76	Issue Type +	En	Location *	LS			
Category				GPS Latitude/Longitude				
Calegory					End			
Itom	ltem DWR UCIP Field Study		39.3706	79°	39.370679	0		
item				-121.8505	00°	-121.850500	0	
DWR ID								

Comment Code

Inspector Comment

FS_ID:49927 DS_ID:17014 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - afreitag)6/30/2015 Cossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 5/3/2016 2:51:00 PM

LM Start	20.76	Rating **	U	Issue No.	942 (cont)
LM End	20.76	Issue Type +	En	Location *	LS



WS view of corrugated metal pipe risers .



Riser for pipe 2 of 3.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	20.76	Rating **	U	Issue No.		943		
LM End	20.76	Issue Type +	En	Location *	LS			
Category				GPS Latitude/Longitude				
Calegory			Start		End			
DWR UCIP Field Study		39.3706	79°	39.370679				
Item			-121.8505		00°	-121.850500		
DWR ID								

Comment Code

Inspector Comment

FS_ID:49928 DS_ID:17185 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - afreitag)6/30/2015 Cossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 3 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown.

Concrete "U" headwall on both ends. Slide gates in corrugated metal pipe risers on the waterside (WS) slope. Pump structure located on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)]

FS Date: 5/3/2016 2:51:00 PM

LM Start	20.76	Rating **	U	Issue No.	943 (cont)
LMEnd	20.76	Issue Type +	En	Location *	1.0



View of corrugated metal risers located on WS.



View of corrugated metal pipe for pipe 3 of 3.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	20.77	Rating **	М	Issue No.		75		
LM End	20.77	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Erosion / I	Bank Caving		39.3706	641°	39.370641 °		
item				-121.850572 ° -121.850				
DWR ID DWR_MA0013_02_f _ 2016_75								
Comment Code								
E1 : Note a	and monito	or erosion site						
		Inspecto	or Comm	nent				

Photo 1 of 1: FA_2016_MA0013_301_75_20161014_00114.jpg



View of the erosion along the waterside toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	21.35	Rating **	М	Issue No.		935	
LM End	21.35	Issue Type +	En	Location *		WS	
Category	Supplemental				GPS Latitude/Longitude		
Calegory		Start		End			
Item	DWR UCI	P Field Study		39.3661	55 °	39.366155°	
пеш				-121.8598	30°	-121.859880 °	
DWR ID							

Inspector Comment

Comment Code

FS_ID:48493 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of exisiting pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 5/26/2016 7:31:43 AM



Overview of crossing looking downstream.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	21.35	Rating **	М	Issue No.		935 (cont)			
LM End	21.35	Issue Type +	En	Location *		WS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory	alegory					End			
Item	DWR UCI	P Field Study		39.366155 ° 39.366		39.366155	0		
item				-121.8598	80°	-121.859880	0		
DWR ID									

Comment Code

Inspector Comment

FS_ID:48493 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of exisiting pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 5/26/2016 7:31:43 AM



View of WS daylight. Hole present at pipe daylight.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	21.83	Rating **	М	Issue No.		934			
LM End	21.83	Issue Type +	En	Location *		WS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.3623	78°	39.362378°			
item				-121.8673	50°	-121.867350 °			
DWR ID						·			

Comment Code

Inspector Comment

FS_ID:48036 DS_ID:16394 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

Manual 519, June 1962 (HLM 22.08)] FS Date: 5/3/2016 2:57:00 PM

UCIP Comments: 4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

 LM Start
 21.83
 Rating **
 M
 Issue No.
 934 (cont)

 LM End
 21.83
 Issue Type +
 En
 Location *
 WS



Overview of crossing looking upstream at the left bank of Cherokee Canal.



View of WS headwall.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence C: Enforcement

* Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	21.86	Rating **	М	Issue No.	924	
LM End	21.86	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.36210	3 °	39.362103°
пеш				-121.86782	0°	-121.867820°
DWR ID						·

Comment Code

Inspector Comment

FS_ID:47766 DS_ID:16374 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/26/2016 Communication Splice box was still present. Not sure what was done to ever resolve the encroachment issue.6/30/2015 Same as last inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 Unauthorized Encroachment. This crossing is listed multiple times in the USACE Periodic Inspection report as USACE_CESPK_M13E_2011_p_0307, 0315, 0317, 0318 for slope failure on LS hinge. DWR-Flood Maintenance Office records shows that CVFPB has requested AT&T to remove conduit in June 2, 2009 letter. LMA working with CVFPB to resolve.

FIELD_STRUCT_DESC: *ILLEGAL ENCROACHMENT* Underground telephone cable through the levee. Depth unknown. (AT&T) START latitude 39.36210336, longitude -121.8678207 END latitude 39.35458541, longitude -121.8823409. Line extends from Gridley Colusa Highway to the south end of project levee along landside (LS) shoulder and levee crown hinge point. Levee sloughs along cable trench after heavy rains. [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 5/3/2016 3:01:00 PM

Photo 1 of 1: UCIP_FA_2016_47766_67480.jpg



View of utility line located on LS toe.

LM Start	21.87	Rating **	U	Issue No.		59			
LM End	22.09	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroach	ments		39.3620	22 °	39.360294	0		
пеш				-121.8679	49°	-121.871339	0		
DWR ID	DWR_MA0	013_02_s _ 201	16_59						
		Comn	nent Cod	de					
DT : Ditch									
	Inspector Comment								

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

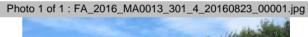
Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	22.03	Rating **	A/W	Issue No.		58	
LM End	22.03	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		39.3607	47°	39.360747°	
пеш				-121.8704	93°	-121.870493°	
DWR ID	DWR_MA0	013_02_s _ 201	16_58				
		Comn	nent Cod	de			
V7 : Trees	/ Woody \	/egetation					
		Inspecto	or Comm	nent			
Fallen tree	Fallen tree on LS slope						

11100	20.07	Rating **	М	Issue No.		4		
LM Start	22.07		IVI	issue ivo.		4		
LM End	22.13	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Vegetatio	n		39.3604	110°	39.359920°		
пеш				-121.871125° -121.8720				
DWR ID	DWR_MA0	013_02_s _ 201	12_4					
		Comn	nent Cod	de				
V6 : Lands	scaping							
		Inspecto	or Comm	nent				





View of landscaping along the toe.

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	22.15	Rating **	М	Issue No.		933		
LM End	22.15	Issue Type +	En	Location *		LS		
Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UCIP Field Study			39.35982	27 °	39.359827°		
пеш				-121.87230	00°	-121.872300°		
DWR ID								

Inspector Comment

Comment Code

FS_ID:48068 DS_ID:16391 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)] FS Date: 5/3/2016 3:03:00 PM

LM Start	22.15	Rating **	М	Issue No.	933 (cont)
LM End	22.15	Issue Type +	En	Location *	LS

Photo 1 of 2: UCIP_FA_2016_48068_67498.jpg



View of WS slope looking from WS headwall to levee crown.

Photo 2 of 2: UCIP_FA_2016_48068_67496.jpg



View of WS slope looking from WS headwall to levee crown.

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

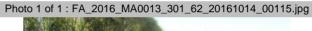
LM Start	22.16	Rating **	М	Issue No.		8	
LM End	22.16	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory			Start		End		
ltem Encroachments			39.3597	'07 °	39.359707°		
			-121.872555 °		-121.872555°		
DWR ID DWR_MA0013_02_s _ 2012_8							
Comment Code							
PR : Pruni	ngs						
Inspector Comment							

Photo 1 of 1: FA_2016_MA0013_301_8_20160823_00004.jpg



View of the debris and prunings along the landside toe.

LM Start	22.33	Rating **	A/W	Issue No.		62		
LM End	22.33	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory			Start		End			
Item	Slope Sta	bility		39.3584	19°	39.358419°		
item	item				88°	-121.875088°		
DWR ID	DWR ID DWR_MA0013_02_s _ 2016_62							
		Comn	nent Cod	de				
			_					
Inspector Comment								





View of slope instability issue along the landside slope.

LM Start	22.37	Rating **	M	Issue No.	76				
LM End	22.37	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Category			Start		End				
Item	Trim / Thi	n Trees		39.3580	18°	39.358018	0		
пеш	item			-121.875815 °		15° -121.875815			
DWR ID	DWR ID DWR_MA0013_02_f _ 2016_76								
		Comn	nent Cod	de					
T2: Thin t	rees to allo	w visibility of	the grou	nd and roo	m to	flood fight.			
	Inspector Comment								

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	09/21/2016 10/06/2016	Tariq Chechi

LM Start	22.54	Rating **	М	Issue No.		77	
LM End	22.54	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Slope Stability				39.3567	75°	39.356775°	
item	item				.17° -121.878417		
DWR ID DWR_MA0013_02_f _ 2016_77							
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
			_				
Inspector Comment							

Photo 1 of 1: FA_2016_MA0013_301_77_20161014_00116.jpg

View of slope instability issue along the landside slope.

10/08/2016

LM Start	22.58	Rating **	С	Issue No.		7		
LM End	22.60	22.60 Issue Type + Ma		Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
Item Erosion / Bank Caving				39.356498°		39.356303°		
пеш			-121.8790	30°	-121.879417°			
DWR ID	WR ID DWR_MA0013_02_s _ 2012_7							
Comment Code								
E1 : Note and monitor erosion site.								

Inspector Comment

No Photos

CR : Crown

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement